2003

Virginia Department of Transportation Daily Traffic Volume Estimates Including Vehicle Classification Estimates

where available

Special Locality Report 154

Town of Christiansburg

Prepared By

Virginia Department of Transportation Mobility Management Division

In Cooperation With

U.S. Department of Transportation Federal Highway Administration

Virginia Department of Transportation Mobility Management Division Traffic Monitoring Section

The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along streets and highways and other sources. From these data, estimates of the average number of vehicles that traveled each segment of road are calculated. VDOT periodically publishes booklets listing these estimates.

One of these booklets, titled "Average Daily Traffic Volumes with Vehicle Classification Data, on Interstate, Arterial and Primary Routes" includes a list of each Interstate and Primary highway segment with the estimated Annual Average Daily Traffic (AADT) for that segment. AADT is the total annual traffic estimate divided by the number of days in the year. This booklet also includes information such as estimates of the percentage of the AADT made up by 6 different vehicle types, ranging from cars to double trailer trucks; estimated Annual Average Weekday Traffic (AAWDT), which is the number of vehicles estimated to have traveled the segment of highway during a 24 hour weekday averaged over the year; as well as Peak Hour and Peak Direction factors used by planners to formulate design criteria.

In addition to the Primary and Interstate publication, one hundred books are published periodically, one for each of 100 areas across the state defined by VDOT for record-keeping purposes. These books include traffic volume estimates for roads within the county, cities, and towns within the area. These books are titled "Daily Traffic Volumes Including Vehicle Classification Estimates, where available; Jurisdiction Report numbers 00 through 99".

Also available are a number of reports summarizing the average Vehicle Miles Traveled (VMT) in selected jurisdictions and other categories of highways. There are many different ways to present traffic volume summary information. Because the user determines the value of each presentation, the reports have been redesigned based on user requests and feedback. The people at VDOT Mobility Management's Traffic Monitoring Section who produce these books welcome requests for other helpful ways of presenting the summary information.

A compact disc (CD) is available that includes files in the Adobe® Portable Document Format (PDF) that can be displayed, searched, and printed using common desktop computer equipment. The CD includes the publications described above as well as a number of other reports, including specialized VMT summaries and smaller AADT reports for each city and town separately.

Publication Notes

Parallel Roads

For road inventory and management purposes, some roadways are counted separately by direction and have separately published traffic estimates for each direction of travel. Examples of such roadways are the interstate system and routes with separated facilities and (usually) one-way traffic facilities in urban areas. In these publications, they are referred to as parallel roads. As a convenience for the users of the publication, the listing for segments of roads with parallel segments are published with both the traffic estimates for their own direction of travel (e.g. I-95 Northbound) as well as the estimate of the total of all traffic on the same route including parallel roadways (all directions of I-95). The publication will have a "Combined Traffic Estimates for Parallel Roadways on this Route" or "Combined Traffic" identifiers for the combined direction of travel estimates.

Roadways such as I-395 with a North segment, a South segment and a separate Reversible lane segment will have the estimate for more than two parallel roadways included in the entire combined traffic estimate.

Some routes have very complicated paths through cities and towns. These parallel paths may be too complex to allow a relationship between nearby sections of the opposite direction on the same route. In this case, to indicate that the traffic estimates for such a road segment may not include all directions of traffic on that route, the line that would list the combined values will indicate "NA" for not available.

VDOT's traffic monitoring program includes more than 100,000 segments of roads and highways ranging from several mile sections of Interstate highways to very short sections of city streets. Due to problems experienced obtaining some traffic count data, and the level of quality necessary to maintain confidence in the data, no estimate is currently available for some segments of roadway. These segments are included in the publications indicating "NA" for not available. It is the intention of the VDOT's Mobility Management Traffic Monitoring group to obtain the data necessary and to report traffic volume estimates on all road segments included in these publications.

Many of the road segments in this program are local secondary roads. The amount and detail of data collected on these roads are not as great as the data collected on higher volume roads. The vehicle classification, average weekday traffic volumes, and the theoretical design hour traffic volumes are not calculated for these roads. The publications indicate "NA" for the information that is not available.

This publication is based on a traffic monitoring program initiated in 1997. Because the data collection techniques and statistical evaluation processes are different than those used in previous years, comparison with previous publications may be misleading.

Glossary of Terms:

Route: The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

Length: Length of the traffic segment in miles.

AADT: Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

4Tire: Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

Bus: Percentage of the traffic volume made up of busses.

2Axle Truck: Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

3+Axle Truck: Percentage of the traffic volume made up of single unit trucks with three or more axles

1Trail Truck: Percentage of the traffic volume made up of units with a single trailer.

2Trail Truck: Percentage of the traffic volume made up of units with more than one trailer.

QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link

K Factor: The estimate of the portion of the traffic volume traveling during the peak hour or design hour.

QK: Quality of the Peak Hour estimate:

- A Factor based on 30th Highest Hour Observed During at least 250 days of Continuous Traffic Data
- B Factor based on other Hour Observed During Less than 250 days of Continuous Traffic Data
- Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of design hour
- N Peak Hour Factor of Similar Neighboring Traffic Link
- O Provided by External Source

Dir Factor: The estimate of the portion of the traffic volume traveling in the peak direction during the peak hour..

AAWDT: Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.

QW: Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- M Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source

Year: Year for which the published values are appropriate. If the Quality of AADT (QA) is "R", the year is the year that the raw traffic count was collected, and if available,

Route Shield Legend

Route Systems

North
81 Interstate Route Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.

(29) US Route

7 Virginia State Route

(600) Secondary Route

Special Routes

Bus Bus - Business Route
Bypas - Bypass Route
Truck - Truck Route
ALT ALT - Alternate Route
Wve - Wve Route connector

P - Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.

The VDOT Maintainenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

Virginia Department of Transportation Mobility Management Division 2003 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Christiansburg

					ı	own of C	Inristian	sburg								
Route	Length	AADT	QA	4Tire	Bus			uck 1Trail		QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Christiansl	านาร					27 Olic	0.700	TTTGII	ZIIGII		i dotoi		1 40101			
				From:	S	CL Christia		ear I-81								
(8)	0.22	14000	G	95%	0%	3%	1%	1%	0%	F	0.091	F	0.591	15000	G	2003
				To: From:		Old SCL	Christians	sburg	-							
8 W Main St	0.77	13000	G	95%	0%	3%	1%	1%	0%	С	0.092	F	0.592	14000	G	2003
				To-		Ra	dford St									
				From:		WCL C	hristiansb	urg								
11 Radford St	1.40	11000	G	97%	0%	2%	0%	1%	0%	С	0.096	F	0.507	12000	G	2003
$\overline{}$				To-			W Main S									
~~)M Mai: 04	0.00	0000	_	From:	00/		Radford S		00/	_	0.000	_	0.50	40000	0	0000
11 W Main St	0.30	9600	G	97%	0%	2%	0%	1%	0%	F	0.089	F	0.56	10000	G	2003
~~~				From:		Bus US 46	60 S Frank	din St								
{11} E Main St	0.12	8300	G	97 <u>%</u>	0%	2%	0%	1%	0%	F	0.087	F	0.514	8800	G	2003
$\smile$				To: From:			anoke St									
Poonska St	0.11	13000	G	97%	0%	2%	Main St 0%	1%	0%	F	0.087	F	0.529	12000	G	2003
Roanoke St	0.11	13000	G	97%	0%	2%	0%	170	0%	Г	0.067	Г	0.529	13000	G	2003
~~				From:			raig St									
11 Roanoke St	0.98	12000	G	97%	0%	2%	0%	1%	0%	F	0.091	F	0.535	13000	G	2003
~				To: From:		SR 11	1 Depot S	St	-							
11 Roanoke St	0.90	15000	G	95%	0%	2%	1%	1%	0%	С	0.064	F	0.549	16000	G	2003
$\bigcirc$				To:		ī	JS 460									
11 Roanoke St	0.91	17000	G	93%	0%	2%	1%	3%	0%	С	0.083	F	0.567	18000	G	2003
(11) r todarionio ot	0.0.			- T							0.000	•	0.00.		•	_000
D	0.00	0500		From:		20 Mile No			-00/		0.004		0.507	0000	N.	0000
[11] Roanoke St	0.29	8500	N	93%	0%	2%	1%	3%	0%	N	0.091	N	0.507	9000	N	2003
~~~				From:		Tower Ro	d, Hampto	n Rd								
11 Roanoke St	2.01	8500	G	93 <u>%</u>	0%	2%	1%	3%	0%	F	0.091	F	0.507	9000	G	2003
$\overline{}$				To-		ECL C	hristiansb	urg								
North				From:		SCL C	hristiansb	urg								
(81)	3.90	22000	G	72%	1%	1%	1%	24%	2%	F	0.067	F		22000	G	2003
	Combined Traffic:	45000	G	72%	1%	1%	1%	24%	2%	F	0.068	F	0.525	44000	G	
				To: From:		US 1	1 US 460	1								
North	0.77	05000	_		40/				20/	_	0.004	_		25000	0	2002
81	0.77	25000	G	72%	1%	1%	1%	24%	2%	F	0.064	F	0.500	25000	G	2003
	Combined Traffic:	49000	G	72% To:	1%	1%	1%	24%	2%	F	0.063	F	0.520	48000	G	
							hristiansb	_								
South	4.07	22000	_	From:	40/		hristiansb		20/	_	0.070	_		22000	0	2002
81	4.27	23000	G	73%	1%	1%	1%	23%	2%	F	0.070	F		22000	G	2003
	Combined Traffic:	45000	G	72%	1%	1%	1%	24%	2%	F	NA			44000	G	
South				From:		US 1	1 US 460									
South 81	0.34	24000	G	73%	1%	1%	1%	23%	2%	F	0.067	F		23000	G	2003
(01)			G	72%	1%	1%	1%	24%	2%	F	0.063	F	0.520	48000	G	2000
	Combined Trame.	40000	·	To:	1 /0		hristiansb		270	•	0.000	•	0.020	40000	O	
				From:					1							
(111) Cambria Stre	et 0.79	5800	G	95%	0%	2%	JS 460 1%	1%	0%	С	0.09	F	0.524	6100	G	2003
111) Carribria Sile	0.79	5500	3	JJ /0	U /U			1 /0	0 /0	J	0.03	'	0.024	0100	J	2000
			_	From:	101		llett Rd	401			0.00-	_	0.540	7100		0000
	-1 000	0700	G	96%	1%	3%	0%	1%	0%	С	0.095	F	0.513	7100	G	2003
111 Cambria Stre	et 0.39	6700	•	Terr		D	epot St									
111 Carribria Sire	et 0.39	6700		To: From:			mhria St									
				From:	0%	Car	mbria St	1%	0%	F	0 093	F	0.501	4600	G	2003
Depot Street	0.39 0.97	4300	G		0%	2%	1%	1%	0%	F	0.093	F	0.501	4600	G	2003
Depot Street	0.97	4300	G	96% From:		Car 2% F	1% Park St									
				96% To: From: 96%	0%	2% P 2%	1% Park St 1%	1%	0% 0%	F C	0.093	F F	0.501	4600 6300	G G	2003
Depot Street	0.97	4300	G	96% From:		2% P 2%	1% Park St 1% US 11	1%								
Depot Street 111 Depot Street	0.97	4300 5900	G G	96% To: 96% To:	0%	Cai 2% F 2% U	1% Park St 1% US 11 Phristiansb	1% urg	0%		0.096		0.518	6300		2003
Depot Street	0.97	4300	G	96% From: 96% To:		Car 2% F 2% WCL C 2%	1% Park St 1% US 11	1%								

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Virginia Department of Transportation Mobility Management Division 2003 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Christiansburg

						Γown of Christi	ansburg								
Route	Length	AADT	QA	4Tire	Bus	2Axle 3+A	Truck	2Trail	- QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
Town of Christiansburg								ZIIali		i actor		i actor			
114 Peppers Ferry Road	0.63	NA		From:		Bus US 46	50			NA			NA		
,				To-		US 460									
~~~				From:		US 11, BUS U									
460 11 Roanoke St	0.91	17000	G	93%	0%	2% 1%	3%	0%	С	0.083	F	0.567	18000	G	2003
Poppelso St	0.29	8500	N	From: 93%	0%	2% North I-8		0%	NI.	0.091	N	0.507	9000	NI	2003
460 11 Roanoke St	0.29	0500	IN	93%	0%			0%	N	0.091	IN	0.507	9000	N	2003
(460) (11) Roanoke St	2.01	8500	G	From: 93%	0%	Tower Rd, Ham 2% 1%		0%	F	0.091	F	0.507	9000	G	2003
400 (11)				To:		ECL Christian									
Bus				From:		NCL Christian									
N Franklin St	0.97	40000	N	89%	0%	1% 1%		1%	N	0.08	Ν	0.583	42000	N	2003
Bus				To: From:		SR 114 Peppers US 11 Mair									
(460) (11) E Main St	0.12	8300	G	97%	0%	2% 0%	1%	0%	F	0.087	F	0.514	8800	G	2003
Puis				To: From:		Roanoke S SR 114 Peppers									
Bus (460)	0.66	53000	G	95%	0%	1% 1%		0%	С	0.082	F	0.55	55000	G	2003
<u>~</u>				To: From:		US 460									
Bus (460) (11) Roanoke St	0.11	13000	G	97%	0%	E Main S 2% 0%		0%	F	0.087	F	0.529	13000	G	2003
400 (11)				To:		Craig St									
Bus  A60 (11) Roanoke St	0.98	12000	G	97%	0%	2% 0%	1%	0%	F	0.091	F	0.535	13000	G	2003
460 11 Roanoke St	0.96	12000	G	97 70 To:	0%	SR 111 Dep		0%	Г	0.091	Г	0.555	13000	G	2003
Bus				From:		US 460									
(460)	0.18	16000	G	96%	0%	2% 1%	1%	0%	F	NA			16000	G	2003
Bus				From:		WCL Christian	nsburg								
(460) N Franklin St	0.11	32000	G	96%	0%	2% 1%	1%	0%	F	0.089	F	0.592	34000	G	2003
Bus				To: From:		SR 111 Camb	ria St								
N Franklin St	1.38	27000	G	96%	0%	2% 1%	1%	0%	С	0.082	F	0.534	29000	G	2003
Pure				To: From:		Depot St SR 111 Depo									
Bus (460) (11) Roanoke St	0.90	15000	G	95%	0%	2% 1%		0%	С	0.064	F	0.549	16000	G	2003
$\bigcirc$				To:		US 460									
Bus 460 N Franklin St	0.28	12000	G	96%	0%	Depot St 2% 1%		0%	F	0.083	F	0.518	12000	G	2003
460 141 Tarikiii 1 St	0.20	12000	•	To:	070	US 11 Mair		070	'	0.000	•	0.510	12000	0	2000
				From:	60-	640 JB-154 SCL C	Christiansbur	g							
1 Falling Branch Rd	0.46	NA								NA			NA		
				To:		US 11 Roano									
2500	0.14	NA		From:	60-6	666 JB-154 WCL 0	Christiansbu	g		NA			NA		
3500	0.11			To:		SR 8 W Main	Street			10,					
				From:		ECL Christian	sburg								
(3501) S Franklin St	1.21	4500	G	97%	0%	2% 1%		0%	С	0.103	F	0.735	4800	G	2003
				From:		Alleghany Allleghany									
(3501) S Franklin St	0.57	6000	G	97%	0%	2% 1%	1%	0%	F	0.102	F	0.69	6300	G	2003
				To:		US 460 Mai									
Phlogor St	0.00	6400	6	From:	00/	US 11 Mair		00/	_	0.00	_	0.522	6500		2002
(3502) Phlegar St	0.08	6100	G	97% To:	0%	2% 1% First St	0%	0%	С	0.09	F	0.532	6500	G	2003
<u> </u>			_	From:		Phlegar S					_			_	
(3502) First St	0.40	6000	G	96% To:	0%	2% 0% US 460 Roand		0%	С	0.096	F	0.518	6400	G	2003
				From:		SR 8 App. I		<u>_</u>							
(3503) Depot St	0.12	9300	G	97%	0%	2% 1%		0%	F	0.091	F	0.663	9900	G	2003
				To:		College S									

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# Virginia Department of Transportation Mobility Management Division 2003 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Christiansburg

					•	01111 01	O modani	obu, q								
Route	Length	AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
own of Christiansburg									_							
				From:		C	College St									
3503) Depot St	0.14	NA									NA			NA		
				To: From:			US 11		-							
3503) Depot St	0.41	NA									NA			NA		
				To:		C	C7US 460									
Depot St	0.91	NA		From:							NA			NA		
				To:			SR 111									
				From:		F	E Main St									
3504) Park St	0.87	1700	G	96%	0%	2%	0%	1%	0%	С	0.103	F	0.571	1800	G	2003
				To:			SR 111									
				From:		R	oanoke St									
3505) E Main St	0.17	2200	G	96%	0%	2%	0%	1%	0%	F	0.118	F	0.782	2300	G	2003
				To:			Park St									
				From:			SR 111									
3506) Ellett Rd	0.39	2600	G	96%	1%	2%	1%	1%	0%	C 0.11	0.117	F	0.568	2800	G	2003
				To:		NCL (	Christiansbu	ırg								
				From:		C	anaan Rd									
Alleghany St		2300	G								0.096	F		2500	G	2003
				To:		l	Miller St									
				From:			Plum St		Ī							
Church St		580								0.	0.078	F		610	G	2003
				To:			King St									
				From:		Re	egan Drive									
Clearview Drive		2600	G		<u> </u>					0.096	F	0.606	2600	G	2003	
				To:		Wir	mmer Street									
				From:		1	Fisher St									
Electric Way		510	G								0.094	F		540	G	2003
				To:		Sin	mmons Rd									
	·			From:		De	epot Street		Ī							
North Drive		250	G	-			•				0.105	F	0.593	250	G	2003
				To:		E. 1	Main Street									
				From:		Le	ester Street									
Republic Road		590	G	<u> </u>							0.11	F	0.602	590	G	2003
•				To:		P	ark Street									
				From:		0	verhill Rd									
Ridge Rd		110	G		Overmit Nu						0.101	F		120	G	2003
				To:		Dogv	wood Terrac	e								
<del></del>				From:		Bria	rwood Drive	<del>-</del>								
Summitridge Road		770	G								0.102	F	0.588	770	G	2003
				To:		S. Fr	anklin Stree	t								

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